

REMARKS

I. Introduction

By the present Amendment, claims 1, 9, 15, 16, 21, and 24 have been amended. Claim 25 is newly presented for consideration. Accordingly, claims 1, 3, 6-12, 14-21, 24, and 25 are now pending in the application. Claims 1, 9, 16, 21, and 24 are independent.

II. Office Action Summary

In the Office Action of October 9, 2007, claims 1, 3, 5, 6, 11, and 24 were rejected under 35 USC §103(a) as being unpatentable over U.S. Patent No. 6,311,819 issued to Stromme et al. ("Stromme") in view of U.S. Patent No. 4,015,703 issued to Keller. Claim 12 was rejected under 35 USC §103(a) as being unpatentable over Stromme in view of Keller, and further in view of U.S. Patent No. 4,993,700 issued to Winkler. Claim 10 was rejected under 35 USC §103(a) as being unpatentable over Stromme in view of Keller, and further in view of U.S. Patent No. 4,837,064 issued to Tschudin-Mahrer. Claims 17-20 were rejected under 35 USC §103(a) as being unpatentable over Stromme in view of Keller, and further in view of U.S. Patent No. 3,966,047 issued to Steiner. Claim 21 was rejected under 35 USC §103(a) as being unpatentable over Stromme in view of Keller, and further in view of U.S. Patent No. 5,486,063 issued to Fox et al. ("Fox"). These rejections are respectfully traversed.

III. Allowable Subject Matter

The Examiner's indication that claim 16 has been allowed is noted with appreciation.

IV. Interview Summary

Applicants would like to thank Examiner Kumar for the courtesy and cooperation extended during the interview conducted on January 29, 2008. During the interview, Applicants discussed various typographical and/or clerical errors that had been discovered in the Specification, and presented proposals for correcting them. Applicants further indicated that there were various features in the claimed invention that were not present in the cited references. In particular, Applicants noted that the present invention directs the sheet in a substantially horizontal direction when in contact with the sheet supporting surface area. The arrangement of the sheet transfer rollers was also discussed. It was agreed that incorporating such features into the pending claims would define over the current references.

V. Amendments to the Specification

By the present Amendment, Applicants have made several changes to the Specification to correct to correct the typographical and clerical errors discussed during the interview.

VI. Rejections under 35 USC §103

Claims 1, 3, 6, 11, 14, and 24 were rejected under 35 USC §103(a) as being unpatentable over Stromme in view of Keller. In rejecting the claims, the Office Action indicates that Stromme discloses an apparatus that includes a sheet transfer member, and a transfer surface that is in contact with the sheet so that it is transferred by the sheet transfer member. The Office Action additionally indicates that a sheet supporting surface area is provided to be in contact with the sheet transferred by the sheet transfer member. The Office Action further indicates that Stromme discloses additional features recited in the instant claims. The Office

Action admits, however, that Stromme fails to disclose the sheet separating away from the path of an imaginary straight line passing through the information reading point. Keller is relied upon for disclosing a sheet material transport system having the ability to vary the input feeding and output angles of the media sheet. Applicants respectfully disagree.

As amended, independent claim 1, for example, defines an apparatus for handling sheets that comprises:

- a sheet transfer member being movable, and having a transfer surface contactable with one of the sheets so that the one of the sheets is transferred by the sheet transfer member,

- a sheet supporting surface area being contactable with the one of the sheet transferred by the sheet transfer member, said sheet supporting surface extending to be contactable with the one of the sheet between the transfer surface and the information reading point, and

- an information reader arranged to face to the one of the sheet transferred by the sheet transfer member and having in an information reading range including an information reading point, in which reading range an information is securely readable from the one of the sheets,

- wherein as seen in a view direction perpendicular to a thickness direction of the one of the sheets and a transferred direction of the one of the sheets transferred by the sheet transfer member, a tangential line of a boundary point of the transfer surface of the sheet transfer member from which boundary point the one of the sheets starts to separate away from the transfer surface extends in a side area of an imaginary straight line passing the information reading point and the boundary point, which side area including the sheet supporting surface area,

- wherein the tangential line intersects the sheet supporting surface area as seen in the view direction to press the one of the sheets against the sheet supporting surface area, and

- wherein the one of the sheet transferred by the sheet transfer member is substantially planar with the sheet supporting surface area when in contact therewith.

The apparatus of independent claim 1 includes a sheet transfer member, a sheet supporting surface area, and an information reader. The sheet transfer member is movable and has a transfer surface that can contact the sheets so that the sheet is transferred. The sheet supporting surface area makes contact with the sheet being transferred by the sheet transfer member and extends such that it contacts the sheet between the transfer surface and the information reading point. The information reader is arranged to face the sheet being transferred and has an information reading range that includes an information reading point in order to read information from the sheet being transferred. According to independent claim 1, when seen in a view direction that is perpendicular to the thickness direction of the sheet and the direction that is being transferred by the sheet transfer member, a tangential line of the boundary point of the transfer surface of the sheet transfer member from which the sheet starts to separate away from the transfer surface extends in an area of an imaginary straight line passing the information reading point and the boundary point with the side area including the sheet supporting surface area. The tangential line intersects the sheet supporting surface area as seen in the view direction to press the sheet against the sheet supporting surface area. Additionally, the sheet being transferred by the sheet transfer member is substantially planar with the sheet supporting surface area when it is in contact with it.

The Office Action had indicated that the cited references disclose all of the features of independent claim 1, and that Keller, in particular, disclosed a sheet material transport system having the ability to vary the input feeding and output angles of the media sheet. As discussed during the interview, however, Keller discloses guard meshes (22) that do not come into contact with the sheet and are

not intended to provide any guidance to the sheet being transported. Furthermore, upon exiting the sheet transfer member, the sheet being transported never makes contact with a sheet supporting surface area and never becomes substantially planar therewith. Accordingly, the cited references fail to provide any disclosure, or suggestion, for features now recited in independent claim 1, such as:

wherein as seen in a view direction perpendicular to a thickness direction of the one of the sheets and a transferred direction of the one of the sheets transferred by the sheet transfer member, a tangential line of a boundary point of the transfer surface of the sheet transfer member from which boundary point the one of the sheets starts to separate away from the transfer surface extends in a side area of an imaginary straight line passing the information reading point and the boundary point, which side area including the sheet supporting surface area,

wherein the tangential line intersects the sheet supporting surface area as seen in the view direction to press the one of the sheets against the sheet supporting surface area, and

wherein the one of the sheet transferred by the sheet transfer member is substantially planar with the sheet supporting surface area when in contact therewith.

It is therefore respectfully submitted that independent claim 1 is allowable over the art of record.

Claims 3, 6-8, 10-12, 14, 15, 17-20, and 25 depend from independent claim 1, and are therefore believed allowable for at least the reasons set forth above with respect to independent claim 1. In addition, these claims each introduce novel elements that independently render them patentable over the art of record.

By the present Amendment, Applicants have amended claims 9, 16, 21, and 24 to incorporate the limitation "the one of the sheet transferred by the sheet transfer member is substantially planar with the sheet supporting surface area when in contact therewith."

As discussed during the interview, and previously indicated with respect to independent claim 1, this particular feature is not shown or suggested by the art of record. It is therefore respectfully submitted that independent claims 9, 16, 21, and 24 are allowable over the art of record.

VII. Conclusion


For the reasons stated above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, the issuance of a Notice of Allowance is believed in order, and courteously solicited.

If the Examiner believes that there are any matters which can be resolved by way of either a personal or telephone interview, the Examiner is invited to contact Applicants' undersigned attorney at the number indicated below.

AUTHORIZATION

Applicants request any shortage or excess in fees in connection with the filing of this paper, including extension of time fees, and for which no other form of payment is offered, be charged or credited to Deposit Account No. 01-2135 (Case: 500.43486X00).

Respectfully submitted,
ANTONELLI, TERRY, STOUT & KRAUS, LLP.

/Leonid D. Thenor 
Leonid D. Thenor
Registration No. 39,397

LDT/vvr
1300 N. Seventeenth Street
Suite 1800
Arlington, Virginia 22209
Tel: 703-312-6600
Fax: 703-312-6666

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